

CLAIMS

- 1 – A 4,4'-biphenol polysulfone composition comprising :
- as main ingredient, at least one polysulfone comprising more than 50 mol. % of recurring units formed by reacting 4,4'-biphenol with at least one sulfone monomer SM<sub>1</sub> (B<sup>ol</sup> PSU),
  - more than 0.01% by weight, based on the total weight of the composition, of at least one phosphorus-containing compound chosen from organic phosphites and organic phosphonites, and
  - at least one polysulfone comprising more than 50 mol. % of recurring units formed by reacting bisphenol A with at least one sulfone monomer SM<sub>2</sub> (B<sup>ol</sup> A PSU).
- 2 – The composition according to claim 1, wherein the B<sup>ol</sup> PSU consists of recurring units formed by reacting 4,4'-biphenol with at least one monomer chosen from 4,4'-dihalodiphenylsulfones.
- 3 – The composition according to anyone of the preceding claims, which comprises at least 60 % by weight, based on the total weight of the composition, of the B<sup>ol</sup> PSU.
- 4 – The composition according to anyone of the preceding claims, wherein the phosphorus-containing compound consists of one or more organic phosphites, optionally in combination with one or more organic phosphonites.
- 5 – The composition according to anyone of the preceding claims, wherein the phosphorus-containing compound consists of tris(2,4-di-t-butyl-phenyl)phosphite, optionally in combination with one or more organic phosphonites.
- 6 – The composition according to anyone of the preceding claims, which comprises above 0.09 % by weight, based on the total weight of the composition, of the phosphorus-containing compound.

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7 – The composition according to anyone of the preceding claims, which comprises less than 0.40 % by weight, based on the total weight of the composition, of the phosphorus-containing compound.

5        8 – The composition according to anyone of the preceding claims, which comprises at least 3 % by weight, based on the total weight of the composition, of the B<sup>ol</sup> A PSU.

10       9 – The composition according to anyone of the preceding claims, which comprises at most 14 % by weight, based on the total weight of the composition, of the B<sup>ol</sup> A PSU.

15       10 – The composition according to anyone of the preceding claims, which comprises less than 10 wt. %, based on the total weight of the composition, of one or more ingredients other than the B<sup>ol</sup> PSU, the phosphorus-containing compound and the B<sup>ol</sup> A PSU.

20       11 – The composition according to anyone of the preceding claims, which has a melt viscosity ratio at 410°C and at a shear rate of 50 s<sup>-1</sup> (VR<sub>40</sub>) of below 1.20.

25       12 - A 4,4'-biphenol polysulfone composition containing at least 60% by weight, based on the total weight of the 4,4'-biphenol polysulfone composition, of at least one B<sup>ol</sup> PSU, said composition having a melt viscosity ratio at 410°C and at a shear rate of 50 s<sup>-1</sup> (VR<sub>40</sub>) of below 1.20.

13 - A process to prepare a 4,4'-biphenol polysulfone composition comprising :

- 30       - providing (A) as main ingredient of the 4,4'-biphenol polysulfone composition, at least one polysulfone comprising more than 50 mol. % of recurring units formed by reacting 4,4'-biphenol with at least one sulfone monomer SM<sub>1</sub> (B<sup>ol</sup> PSU),
- 35       - providing (B) more than 0.01 % by weight, based on the total weight of the 4,4'-biphenol polysulfone composition, of at least one phosphorus-containing compound chosen from organic phosphites and organic phosphonites,

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- providing (C) at least one polysulfone comprising more than 50 mol. % of recurring units formed by reacting bisphenol A with at least one sulfone monomer  $SM_2$  ( $B^{ol}$  A PSU), and
- mixing (A), (B) and (C) at the molten state.

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14 - An article made from the composition according to anyone of claims 1 to 12 or prepared by the process according to claim 13.

10 15 - The article according to claim 14, which is manufactured by an injection moulding process.